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# SPACE OPERATIONS CONTROL CENTER SATELLITE SITUATION REPORT

VOL. 3, NO. 2

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JANUARY 16, 1963

**NASA**

GODDARD SPACE FLIGHT CENTER

GREENBELT, MD.


SPACE OPERATIONS CONTROL CENTER  
GODDARD SPACE FLIGHT CENTER  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

VOLUME 3 NO. 2

JANUARY 16, 1963

SATELLITE SITUATION REPORT

THE FOLLOWING REPORT REFLECTS DATA COMPUTED AND COMPILED BY THE  
GODDARD SPACE FLIGHT CENTER, NORAD, AND SMITHSONIAN ASTROPHYSICAL  
OBSERVATORY AS OF 1430Z ON JANUARY 16, 1963.



RALPH R. STROBLE  
HEAD, OPERATIONS BRANCH

IMPORTANT NOTICE

Beginning with this Satellite Situation Report, only those objects launched by the National Aeronautics and Space Administration (NASA) in 1963 will be shown under the 1963 listing. All the NASA satellites and space probes which have a lifetime of at least 90 minutes will be numbered as follows: The first satellite or space probe will be 1963 N 1, the second will be 1963 N 2, etc. The component classification will be by alphabetical suffix A, B, C, etc., where A refers to the principal payload and B, C, etc., as needed are used first for any subsidiary payloads and then for inert components in order of maximum brightness. All objects launched prior to January 1, 1963 will be unaffected by the new designation and listing method. A column will be added to the chart to show the component's international designation as assigned by the committee on space research (COSPAR).

OBJECTS IN ORBIT

OBJECT	CODE NAME	SOURCE	LAUNCH	NODAL PERIOD	INCL - NATION	APOGEE Km.	PERIGEE Km.	TRANSMITTING FREQ. (MC/S)
1958 LAUNCHES								
ALPHA 1	EXPLORER 1	US	1 FEB	105.2	33.21	1664	357	108.024
BETA 1	ROCKET BODY	US	17 MAR	138.3	34.26	4356	614	
BETA 2	VANGUARD 1	US	17 MAR	133.9	34.25	3965	633	
1959 LAUNCHES								
ALPHA 1	VANGUARD 2	US	17 FEB	125.3	32.86	3290	555	0.9766AU 0.9871AU
ALPHA 2	ROCKET BODY	US	17 FEB	129.6	32.90	3669	553	
ETA 1	VANGUARD 3	US	18 SEP	129.8	33.32	3735	502	
MU 1*	LUNIK 1	USSR	2 JAN	450D	0.01	1.315AU		
NU 1*	PIONEER 4	US	3 MAR	398D	1.30	1.142AU		
IOTA 1	EXPLORER 7	US	13 OCT	101.1	50.29	1083	544	
IOTA 2	ROCKET BODY	US	13 OCT	100.9	50.28	1062	545	
1960 LAUNCHES								
ALPHA 1*	PIONEER 5	US	11 MAR	311.6D	3.35	0.995AU	0.8061AU	
BETA 1	ROCKET BODY	US	1 APR	99.1	48.36	735	699	
BETA 2	TIROS 1	US	1 APR	99.1	48.36	759	682	
BETA 3	NONE	US	1 APR	97.8	48.48	706	610	
BETA 4	NONE	US	1 APR	99.8	48.16	802	706	
GAMMA 2	TRANSIT 1B	US	13 APR	94.3	51.23	617	360	
GAMMA 4	NONE	US	13 APR	96.7	51.21	738	472	
EPSILON 3	NONE	USSR	15 MAY	92.3	65.00	512	264	
ZETA 1	MIDAS 2	US	24 MAY	94.2	32.99	595	381	
ETA 1	TRANSIT 2A	US	22 JUN	101.6	66.71	1066	605	
ETA 2	GREB	US	22 JUN	101.6	66.71	1058	610	
ETA 3	ROCKET BODY	US	22 JUN	101.4	66.68	1041	609	
ICTA 1	ECHO 1	US	12 AUG	115.4	47.23	1800	1159	
ICTA 2	ROCKET BODY	US	12 AUG	118.0	47.24	1689	1498	
IOTA 3	METAL OBJECT	US	12 AUG	118.2	47.19	1696	1507	
ICTA 4	METAL OBJECT	US	12 AUG	118.2	47.15	1714	1491	
IOTA 5	METAL OBJECT	US	12 AUG	118.3	47.27	1711	1509	

# OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>MODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE km.</u>	<u>PERIGEE km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
<b>1960 LAUNCHES</b>								
NU 1	COURIER 1B	US	4 OCT	106.9	28.35	1214	965	
NU 2	ROCKET BODY	US	4 OCT	106.4	28.23	1224	911	
XI 1	EXPLORER 8	US	3 NOV	112.3	49.95	2262	412	
XI 2	ROCKET BODY	US	3 NOV	112.0	49.90	2228	416	
XI 3	NONE	US	3 NOV	110.1	49.42	2058	411	
XI 4	NONE	US	3 NOV	111.0	50.45	2154	397	
PI 1	TIROS 2	US	23 NOV	98.2	48.49	710	639	
PI 2	ROCKET BODY	US	23 NOV	98.1	48.51	725	614	
PI 3	NONE	US	23 NOV	98.1	48.49	707	636	
PI 4	NONE	US	23 NOV	98.2	48.52	754	602	
<b>1961 LAUNCHES</b>								
ALPHA 1	SAMOS 2	US	31 JAN	94.8	97.42	543	472	
ALPHA 2	METAL OBJECT	US	31 JAN	94.8	97.43	538	472	
GAMMA 1*	VENUS PROBE	USSR	12 FEB	300D	0.58	1.0190AU	0.7183AU	
DELTA 1	EXPLORER 9	US	16 FEB	117.4	38.86	2502	633	
DELTA 2	ROCKET BODY	US	16 FEB	118.4	38.76	2569	659	
DELTA 3	NONE	US	16 FEB	INSUFFICIENT OBSERVATIONS				
KAPPA 1	EXPLORER 10	US	25 MAR	POSITION UNCERTAIN				
NU 1	EXPLORER 11	US	27 APR	107.8	28.82	1775	489	
OMICRON 1	TRANSIT 4B	US	29 JUN	103.8	66.82	997	881	54;150;324;400
OMICRON 2	INJUN-SR-3	US	29 JUN	103.8	66.82	997	882	136.5
OMICRON 3-162**	METAL OBJECTS	US	29 JUN					
RHO 1	TIROS 3	US	12 JUL	100.3	47.87	822	734	
RHO 2	ROCKET BODY	US	12 JUL	100.3	47.88	831	720	
RHO 3	METAL OBJECT	US	12 JUL	98.8	47.92	791	617	
RHO 4	METAL OBJECT	US	12 JUL	101.9	47.85	933	774	
SIGMA 1	MIDAS 3	US	12 JUL	161.5	91.18	3545	3344	
SIGMA 3	METAL OBJECT	US	12 JUL	161.2	91.16	3554	3307	
SIGMA 4	METAL OBJECT	US	12 JUL	161.9	91.21	3577	3345	
UPSILON 1	EXPLORER 12	US	16 AUG	INSUFFICIENT OBSERVATIONS				
DELTA 1	MIDAS 4	US	21 OCT	166.0	95.86	3770	3482	

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
<b>1961 LAUNCHES</b>								
A DELTA 3	METAL OBJECT	US	21 OCT	165.6	95.85	3717	3502	
A DELTA 4	METAL OBJECT	US	21 OCT	166.4	95.87	3770	3515	
A ETA 1	TRANSIT 4B	US	15 NOV	105.6	32.43	1099	963	
A ETA 2	TRAAC	US	15 NOV	105.6	32.43	1083	981	
A ETA 3	ROCKET BODY	US	15 NOV	105.5	32.43	1085	965	
<b>1962 LAUNCHES</b>								
ALPHA 1*	RANGER 3	US	26 JAN	406.4D	.3988	1.163AU	0.9839AU	
ALPHA 2	ROCKET BODY	US	26 JAN	INSUFFICIENT OBSERVATIONS				136.23; 136.92
BETA 1	TIROS 4	US	8 FEB	100.3	48.29	839	714	
BETA 2	ROCKET BODY	US	8 FEB	101.3	48.13	950	696	
BETA 3	METAL OBJECT	US	8 FEB	99.4	48.37	748	720	
BETA 4	METAL OBJECT	US	8 FEB	100.2	48.30	820	727	
ZETA 1	ORB. SOL. OBS. 1	US	7 MAR	95.9	32.84	597	542	136.744
ZETA 2	ROCKET BODY	US	7 MAR	95.9	32.84	598	546	
ETA 1		US	7 MAR	91.5	90.88	454	233	
ICTA 1	COSMOS 2	USSR	6 APR	96.9	48.94	1012	192	
KAPPA 1		US	9 APR	153.0	86.67	3414	2780	
KAPPA 3		US	9 APR	152.7	86.65	3373	2790	
KAPPA 4		US	9 APR	153.4	86.67	3435	2788	
MU 2	ROCKET BODY	US	23 APR	INSUFFICIENT OBSERVATIONS				
OMICRON 1	ARIEL	US/UK	26 APR	100.7	53.84	1209	381	136.40E
OMICRON 2	ROCKET BODY	US/UK	26 APR	100.7	53.83	1212	376	
SIGMA 1		US	15 MAY	92.8	82.33	542	279	
UPSILON 1	COSMOS 5	USSR	28 MAY	95.6	49.01	912	195	
OMEGA 1		US	18 JUN	91.8	82.14	383	335	
A ALPHA 1	TIROS 5	US	19 JUN	100.5	58.08	965	598	136.235; 136.922
A ALPHA 2	ROCKET BODY	US	19 JUN	100.4	58.10	966	590	
A ALPHA 3	METAL OBJECT	US	19 JUN	101.7	58.25	1094	590	
A ALPHA 4	METAL OBJECT	US	19 JUN	99.1	57.98	852	581	
A EPSILON 1	TELSTAR 1	US	10 JUL	157.6	44.78	5642	943	136.05
A EPSILON 2	ROCKET BODY	US	10 JUL	157.5	44.78	5622	950	

OBJECTS IN ORBIT (CONT'D)

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>MODAL PERIOD</u>	<u>INCLINATION</u>	<u>APOGEE km.</u>	<u>PERIGEE km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES								
A XI 1	COSMOS 8	USSR	18 AUG	91.9	46.95	507	239	
A OMICRON 1		US	23 AUG	99.6	96.62	855	618	
A OMICRON 2		US	23 AUG	98.3	98.61	752	601	
A OMICRON 3		US	23 AUG	100.9	98.62	951	645	
A OMICRON 4		US	23 AUG	99.6	98.62	847	625	
A RHO 1*	MARINER 2	US	27 AUG	348D	1.66	1.229AU	0.7046AU	
A KAPPA 2	ROCKET BODY	US	27 AUG					
A UPSILON 1		US	1 SEP	93.9	82.81	634	292	
A PSI 1	TIRUS 6	US	18 SEP	98.7	58.29	703	694	136.235; 136.922
A PSI 2	ROCKET BODY	US	18 SEP	98.7	58.27	698	693	
A PSI 3	METAL OBJECT	US	18 SEP	99.4	58.41	758	701	
A PSI 4	METAL OBJECT	US	18 SEP	98.0	58.19	704	627	
B ALPHA 1	ALOUETTE	CANADA	29 SEP	105.5	80.48	1039	994	136.979
B ALPHA 2	ROCKET BODY	US	29 SEP	105.5	80.48	1033	995	
B ALPHA 3	METAL OBJECT	US	29 SEP	105.4	80.52	1031	992	
B ALPHA 4	METAL OBJECT	US	29 SEP	105.5	80.45	1041	992	
B GAMMA 1	EXPLORER 14	US	2 OCT	2184.6	35.24	98236	552	136.44
B GAMMA 2	ROCKET BODY	US	2 OCT	INSUFFICIENT OBSERVATIONS				
B ETA 1	RANGER 5	US	18 OCT	370D	.44422	1.0681AU	0.9498AU	
B ETA 2	ROCKET BODY	US	18 OCT					
B KAPPA 1		US	26 OCT	146.1	71.41	5422	200	
B LAMBDA 1	EXPLORER 15	US	27 OCT	315.3	17.99	17615	311	136.101
B LAMBDA 2	ROCKET BODY	US	27 OCT	INSUFFICIENT OBSERVATIONS				
B MU 1	ANNA 1B	US	31 OCT	107.8	50.13	1183	1077	54; 162; 216; 324
B MU 2	ROCKET BODY	US	31 OCT	107.5	50.13	1179	1053	
B TAU 1		US	13 DEC	115.9	70.35	2755	235	
B TAU 2		US	13 DEC	116.1	70.32	2774	237	
B TAU 3	INJUN 3	US	13 DEC	112.8	70.31	2479	234	
B TAU 4		US	13 DEC	115.7	70.34	2732	238	
B TAU 5		US	13 DEC	115.9	70.32	2754	234	
B TAU 6		US	13 DEC	116.1	70.37	2768	240	
B UPSILON 1	RELAY 1	US	13 DEC	185.0	47.48	7437	1319	136.140; 136.620
B UPSILON 2	ROCKET BODY	US	13 DEC	184.7	47.45	7395	1343	

OBJECTS IN ORBIT

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>NODAL PERIOD</u>	<u>INCLI-NATION</u>	<u>APOGEE Km.</u>	<u>PERIGEE Km.</u>	<u>TRANSMITTING FREQ. (MC/S)</u>
1962 LAUNCHES								
B CHI 1	EXPLORER 16	US	16 DEC	104.3	52.01	1162	763	136.858
B PSI 1	TRANSIT 5A	US	19 DEC	99.2	90.62	730	701	150;400
B PSI 2		US	19 DEC	97.9	90.74	740	574	
B PSI 3		US	19 DEC	99.2	90.63	729	701	
B PSI 4		US	19 DEC	100.3	90.51	839	702	

\* APHELION, PERIHELION IN ASTRONOMICAL UNITS, INCLINATION TO ECLIPTIC.

\*\* ONE HUNDRED AND SIXTY METAL OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1961 OMICRON 1 AND 1961 OMICRON 2. OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED OBJECTS LISTS.

PLEASE ADD THE FOLLOWING TO THE DECAYED OBJECTS LIST:

<u>OBJECT</u>	<u>CODE NAME</u>	<u>SOURCE</u>	<u>LAUNCH</u>	<u>DECAY</u>
1962 B CHI 1		US	14 DEC 1962	8 JAN 1963